



HARWICK STANDARD
DISTRIBUTION CORPORATION

60 S. SEIBERLING ST.
P.O. BOX 9360
AKRON, OH 44305-0360
PHONE: (330) 798-9300
FAX: (330) 798-0214
TECHNICAL FAX: (330) 798-9328
SALES FAX: (330) 798-4089
WWW.HARWICKSTANDARD.COM

ISO 9001-2000
REGISTERED

COUPLING AGENTS

Harwick Standard has a series of silane coupling agents in the form of easy-to-handle, free-flowing powders. These products have different organo-functional groups and can be used in various elastomers, the choice of which depends on the type of vulcanization system in use. In addition, Harwick also offers the liquid line of Silquest Silane Coupling Agents.

Silane coupling agents are used with mineral fillers such as clay, talc, mica and silica to improve the physical properties of vulcanizates. They function by chemically coupling the filler to the backbone of the polymer during vulcanization.

The products currently available are listed below:

DRY LIQUID CONCENTRATES

<u>PRODUCT</u>	<u>ORGANO-FUNCTIONAL GROUP</u>	<u>VULCANIZATION SYSTEM</u>
A-172 DLC	Vinyl	Peroxide cured elastomer (EPR, EPDM, CPE, CSM & NBR)
A-1100 DLC	Amino	Sulfur cured elastomers (SBR, NBR, NR, EPDM, IIR) Metal oxide cured system (CSM, CR)
A-174 DLC	Methacryl	Peroxide cured elastomer (EPR, EPDM, CPE, CSM, NBR)

Continued

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA THAT ARE BELIEVED TO BE ACCURATE AND RELIABLE. APPLICATION AND PERFORMANCE INFORMATION ARE PROVIDED ONLY AS A GUIDE, SINCE THE CONDITIONS OF USE ARE BEYOND THE CONTROL OF HARWICK STANDARD DISTRIBUTION CORPORATION. CONSEQUENTLY, HARWICK STANDARD MAKES NO WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE GOODS OR USES OF THE GOODS OR THE PERFORMANCE OF THE GOODS AND MAKES NO WARRANTIES OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY. BUYER ACKNOWLEDGES THAT HARWICK STANDARD WILL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, DIRECT OR SPECIAL DAMAGES ARISING, DIRECTLY OR INDIRECTLY, IN RESPECT TO SUCH GOODS OR THE USE OR FAILURE THEREOF, WHETHER BASED ON BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE.



HARWICK STANDARD
DISTRIBUTION CORPORATION

60 S. SEIBERLING ST.
P.O. BOX 9360
AKRON, OH 44305-0360
PHONE: (330) 798-9300
FAX: (330) 798-0214
TECHNICAL FAX: (330) 798-9328
SALES FAX: (330) 798-4089
WWW.HARWICKSTANDARD.COM

ISO 9001-2000
REGISTERED

COUPLING AGENTS, continued

LIQUIDS

<u>PRODUCT</u>	<u>ORGANO-FUNCTIONAL GROUP</u>	<u>VULCANIZATION SYSTEM</u>
Silquest A-172	Vinyl	Peroxide cured elastomers (EPR, EPDM, CPE, CSM & NBR)
Silquest A-189	Mercapto	Sulfur cured elastomers (SBR, NBR, NR, EPDM, IIR)
Silquest A-1100	Amino	Sulfur cured elastomers (SBR, NBR, NR, EPDM, IIR) Metal oxide cured system (CSM, CR)
Silquest A-1120	Amino	Sulfur cured elastomers (SBR, NBR, NR, EPDM, IIR) Metal oxide cured system (CSM, CR)
Silquest A-1289	Tetrasulfide	Sulfur cured systems (SBR, NBR, NR & EPDM)
Silquest A-1589	Disulfide	Sulfur cured systems (SBR, NBR, NR & EPDM)
Silquest A-1891 (low odor version of A-189)	Mercapto	Sulfur cured elastomers (SBR, NBR, NR, EPDM, IIR)
Silquest RC-1	Vinyl	Peroxide cured elastomers (EPR, EPDM, CPE, CSM & NBR)

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA THAT ARE BELIEVED TO BE ACCURATE AND RELIABLE. APPLICATION AND PERFORMANCE INFORMATION ARE PROVIDED ONLY AS A GUIDE, SINCE THE CONDITIONS OF USE ARE BEYOND THE CONTROL OF HARWICK STANDARD DISTRIBUTION CORPORATION. CONSEQUENTLY, HARWICK STANDARD MAKES NO WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE GOODS OR USES OF THE GOODS OR THE PERFORMANCE OF THE GOODS AND MAKES NO WARRANTIES OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY. BUYER ACKNOWLEDGES THAT HARWICK STANDARD WILL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, DIRECT OR SPECIAL DAMAGES ARISING, DIRECTLY OR INDIRECTLY, IN RESPECT TO SUCH GOODS OR THE USE OR FAILURE THEREOF, WHETHER BASED ON BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE.